EPS SSR-2 POWER BUS LOSS: RPDA NIRS2 (Includes RPCMs N1RS2 A, B, C and Z13B A, B)

ACTION EQUIP/FUNCTION LOST PCS Node1: C&DH: N1-2 MDM MDM_N1-1 MDM N1-1 Srv Htr Primary NCS MDM √State - Primary If no telemetry √MCC-H RPCM N1RS2 A (Type V) **FGB EPS** RPCM N1RS2B (Type V) FGB:EPS RPCM N1RS2C (Type V) Control of RPCM N13B A If RACU5 - On Control of RPCM N13B B Perform RACU 5 Control of RPCM N13B C Deactivate procedure RPCM Z13B A (Type VI) (SODF: EPS) RPCM Z13B B (Type V) If during Node 1 Pre-Ingress Warm-up, Ingress, or Node1 Shell Htrs String B Post Egress Dryout PMA1 Shell Htrs String B • √ MCC-H for heater PMA3 Shell Htrs Strings configuration A & B SPDA Z14B Htr 1 Node1:TCS SPDA Z13B Htr 2 NODE1:TCS CMG 1 E xt Htr CMG 4 Ext Htr 'Node 1' PCU 2 Htr • sel Node 1 Htr [X] A DDCU Z14B Htr 2 [X] = [1] [2] [3] [4] [5] [6]DDCU Z13B Htr 1 [7] [8] [9] EEATCS Non-op Htr A-1 • cmd Ena Opr Execute Repeat Node 1: TCS NODE1:TCS 'PMA 1' • sel PMA1 [X] A [X] = [1] [3] [4] [5] [7• cmd Ena Opr Execute Repeat Z1:EPS RPCM Z13B B • sel RPC 15 • cmd Close Execute Node1:EPS:RPCM CBM N1 Stbd Pri 1 (Early N1RS1 Comm Transceiver Pwr & 4 RPCM NIRS1 C Htr) CBM N1 Stbd Pri 2 (Early • sel RPCM Detail Comm Spare) CBM N1 Stbd Pri 3 (Early • sel RPC [X], [X] = [5] [12] Comm CTP) CBM N1 Stbd Pri 4 (Early cmd Open Execute Comm RFPDB) Repeat

CREW INDICATION

Caution Messages:

MDM N1-1 Detected RT Fail MDM N1-2 - PMA 1

Advisory Messages:

RPCM N1RS2_A Loss of Comm - NOD1 RPCM N1RS2_B Loss of Comm - NOD1 RPCM N1RS2_C Loss of Comm - NOD1 RPCM Z13B_A Loss of Comm - Z1 RPCM Z13B_B Loss of Comm - Z1 MDM N1-1 Loss of Sync to MDM N1-2 - PMA 1

Telemetry:

PCS FGB:EPS FGB:EPS

RACU Details

RACU 5 Converter - Off RACU 5 Output Current < 1 Amp

RACU 5 Output Voltage ~ 0 volts

NODE 1: EPS

RPCM N1RS2 A - not Active RPCM N1RS2 B - not Active RPCM N1RS2 C - not Active

Z1: EPS

RPCM Z14B A - not Active RPCM Z14B B - not Active

NOTES

- 1) Both MDMs are nominally active. In the event of loss of the primary MDM, the alternate MDM will automatically transition to primary.
- 2 EEATCS, CMG and PCU heaters are not redundant, possible loss of equipment. PCU is powered to provide some heat. String B of the Node 1 and PMA 1 shell heaters are nominally primary. PMA3 heaters are required to prevent condensation. Does not impact 3A or jeopardize 4A/5A since PMA3 goes to vacuum after Shuttle departs.
- 3) Since the The internal Early Comm equipment is lost, the entire Early Comm system is lost. Power to the Port and Stbd antenna is removed.
- 4 Normally the CBMs are powered off.
- 5 The RACU indications will only be valid, if the bus failure is due to a RACU failure.

(Continued)

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EPS SSR-2 POWER BUS LOSS: RPDA NIRS2 (Includes RPCMs N1RS2 A, B, C and Z13B A, B)

ACTION	EQUIP/FUNCTION LOST	CREW INDICATION	NOTES
7.011014			
	4 CBM N1 Port Pri (14)		
	Nod1-2 SDO Card 1A:		
	MDM N1-1 Opr Htr		
	N1-2 SDO Card 1B		
	CMG 1		
	CMG 4		
	PCU 2		
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